



DEPARTMENT OF THE NAVY

NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
BUILDING 77L, U.S. NAVAL BASE
PHILADELPHIA, PENNSYLVANIA 19112-5094

N60478.AR.000140
NWS EARLE
5090.3a

5090
Ser 1379/1421/GFH
SEP 14 1991

IN REPLY REFER TO

U. S. Environmental Protection Agency
Attn: Paul Ingrisano
J. Javits Federal Building
New York, NY 10278

Re: INSTALLATION RESTORATION PROJECT, NAVAL WEAPONS STATION
(NWS) EARLE, COLTS NECK, NJ

Dear Mr. Ingrisano:

Your letter of 12 August 1991 outlined recommendations for Sampling and Biological Assessment by National Oceanic and Atmospheric Administration (NOAA). These recommendations were presented in detail by Mr. Frank Csulak at the 13 August Technical Review Committee (TRC) meeting and a follow up meeting held on 29 August.

During the meeting on 29 August, a tentative agreement was reached that would meet the Navy's objectives, accomplish goals established by the TRC, and also fulfill NOAA's data requirements.

Upon NOAA's concurrence, we will proceed to incorporate the additional sampling into the SI plan of action. Enclosure (1) outlines the tentative agreement. Included are maps of the Pine Creek, Hockhockson Brook and Ware Creek Watersheds and a description of the Navy's proposed sampling effort.

The Navy invites NOAA representatives to participate in the field sampling program and have input on the selection of specific sample locations.

If you have any questions, please contact me at (215) 897-6432.

Sincerely,

Gerald F. Hoover
Remedial Project Manager
By direction of the Commanding Officer

Encl:
(1) Proposed Sampling Plan

Re: INSTALLATION RESTORATION PROJECT, NAVAL WEAPONS STATION
(NWS) EARLE, COLTS NECK, NJ

Copy to:
NJDEP, Joseph Freudenberg
NWS Earle, Gus Hermann
NOAA, Frank G. Csulak

Internal Copy to:
1422/Nick Stencel

PROPOSED SAMPLING PLAN

Map 1 is a USGS map of the Sandy Hook region. Indicated on the map are the Ware Creek watershed boundary (approximate) and Navy property line. Shown also are a municipal solid waste landfill, the approximate location of a sewage treatment facility and an airstrip which have migration pathways into Ware Creek. Map 2 shows in more detail the relationship between the sites under the Navy IR program and Ware Creek. It was agreed that the sampling of migration pathways from the Navy sites be conducted as close to the sites as reasonable. The revised surface water and sediment samples are shown on map 2 and will be incorporated into the SI plan of action. Following is a summary of the sampling plan proposed for this area:

<u>Site #/ Phase</u>	<u>Matrix</u>	<u>Number</u>	<u>Analysis</u>	<u>Description</u>
6/SI	Sed.	4	TCL, TAL	Landfill West of Normandy Road, sed. sample at drainage from site.
	GW	3	TCL, TAL	
	SW	1	TCL, TAL	
12/SI	Sed.	2	TAL	Battery storage Area, no spills documented, samples collected in drainage.
15/SI	Sed.	4	BNA, PCB	One time oily waste water disposal site.
	Soil	2	BNA, PCB	
17/SI	Sed.	4	TCL, TAL	Disposal Site, Sed. and surface water samples collected at wetlands interface.
	SW	2	TCL	
	GW	2	TCL	

Additional analysis to include sediment grain size, TOC, TDS, pH and hardness.

Map 3 depicts the Hockhockson Brook and Pine Creek watersheds (approximate). On Pine Creek a scrap metal dump exists outside the Navy fenceline. Proposed sampling locations 11 and 12 are off base and considerably downstream. For this reason it was decided to delete these locations. Proposed sampling Station 10 was also relocated to better assess drainage from sites 2 and 5.

On the Eastern tributaries of Hockhockson Brook the RI field investigation is similar to the sampling proposed by NOAA. In conjunction with the investigations of sites 4, 10, 13 and 22 surface water and sediment samples were analyzed for TAL metals and TCL organics. The preliminary data including site maps has been provided to the EPA. The additional analysis required, sediment grain size, TOC, TDS and hardness, will be performed at these locations as part of the SI plan of action.

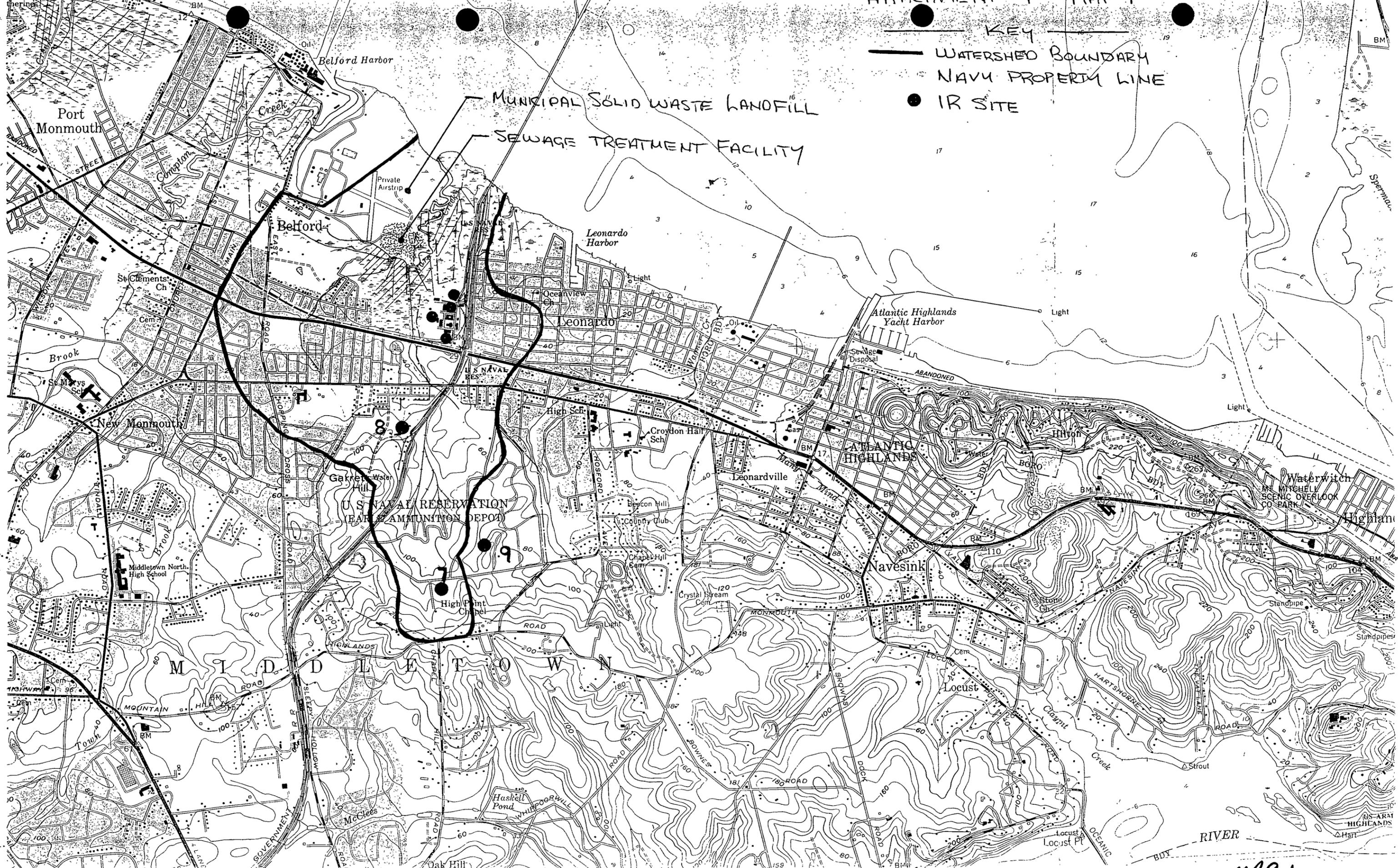
NOAA proposed sampling stations 4, 5 and 6 are downstream of SI sites 16, 28 and 29 on the western tributary of the Hockhockson. The following is a brief description of the SI work planned.

Site #	Matrix	Number	Analysis	Description
16	Soil	6	BNA	Fuel line connecting Bldg C-50 and C-20 ruptured. Less than 50 gal. lost.
28	None			One to several gal of waste oil spilled from storage tank in 1982. Site went through NJDEP site inspection 1986. No further action was recommended.
29	None			In 1977 PCBs from a vandalized transformer spilled at this site. Within 5 days 120 cubic feet of soil was excavated and transported off-site for disposal.

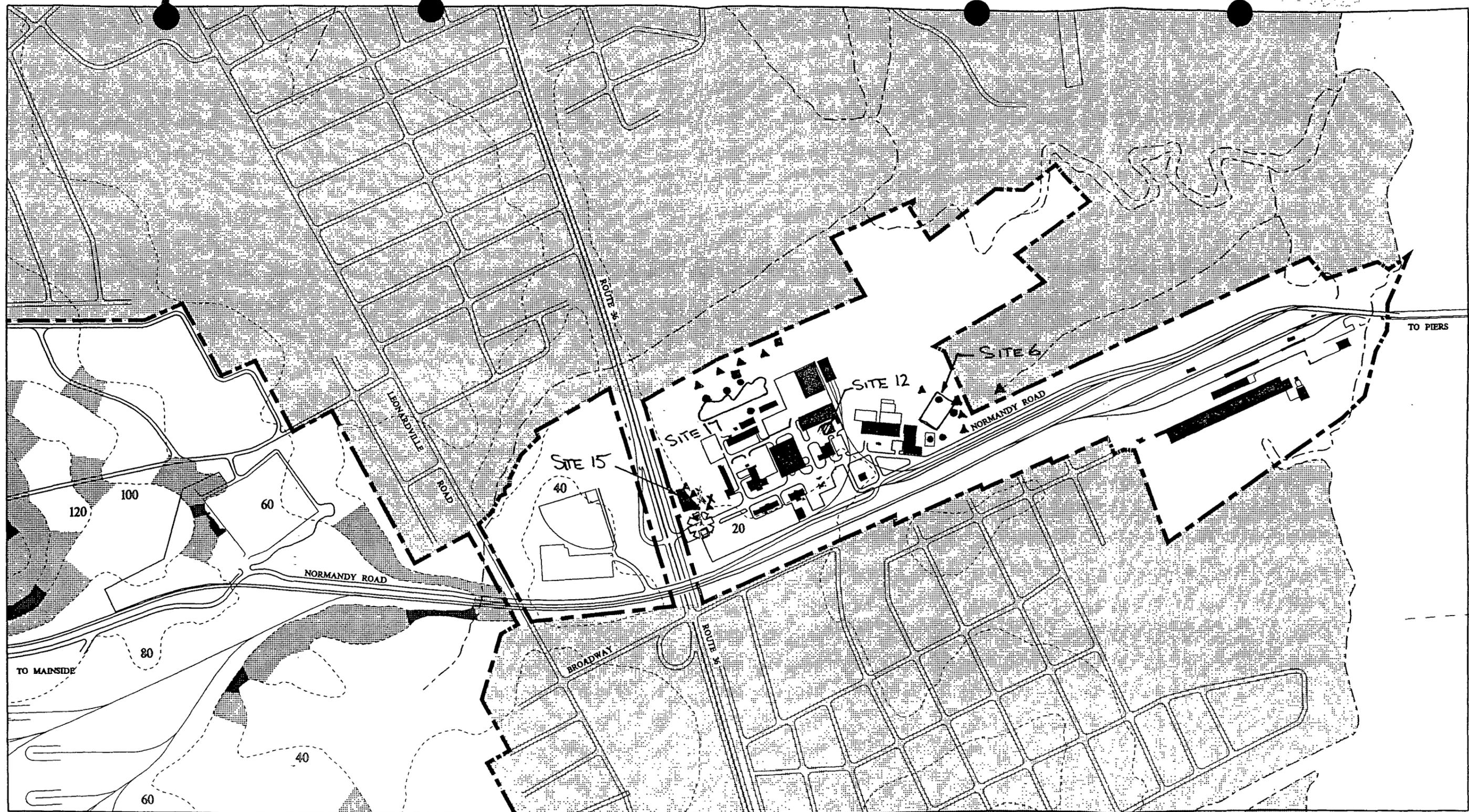
This area is the center of the industrial operations at NWS Earle, an additional source of information for this area is the storm water discharge permit required by the National Pollutant Discharge Elimination System (NPDES). Map 4 indicates the proposed sample location. The following table lists the tests and methods to be performed.

Parameter	Method	Type
Oil + Grease	EPA 413.1	Grab
BOD5	EPA 405.1	Grab and Composite
COD	EPA 410.1	Grab and Composite
TSS	EPA 160.2	Grab and Composite
Total Kjeldahl Nitrogen	EPA 351.2	Grab and Composite
Nitrate + Nitrite	EPA 353.3	Grab and Composite
Total Phosphorus	EPA 365.4	Grab and Composite
pH and Temperature		Grab
Fecal Coliform	SM 908C	Grab
Dissolved Oxygen	EPA 360.1	Grab
Total Residual Cl	EPA 330.4	Grab and Composite
Settleable Solids	EPA 160.5	Grab and Composite

ATTACHMENT 1 MAP 1
KEY
—— WATERSHED BOUNDARY
—— NAVY PROPERTY LINE
● IR SITE



MAP 1



STEEP SLOPES (20 FT. INTERVAL)

10% TO 25%

OVER 25%

— Key —

- GROUND WATER WELL
- ▲ SEDIMENT SAMPLE
- SURFACE WATER SAMPLE
- x SOIL SAMPLE

SITE TOPOGRAPHY AND SLOPES

WATERFRONT ADMIN AREA

MASTER PLAN
NAVAL WEAPONS STATION: EARLE

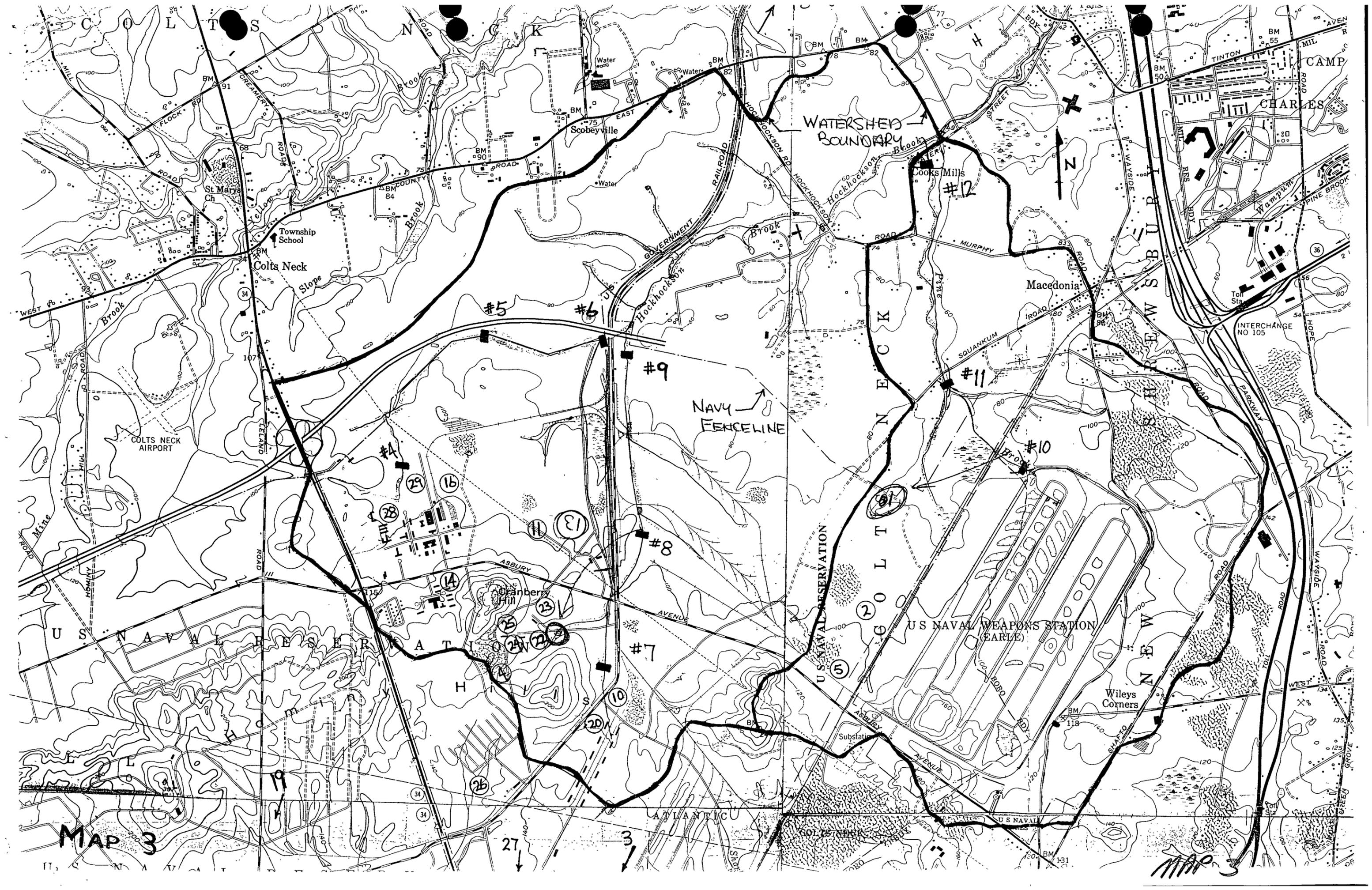
FIGURE 28



0 100 200 400

MAP 2

MAP 2



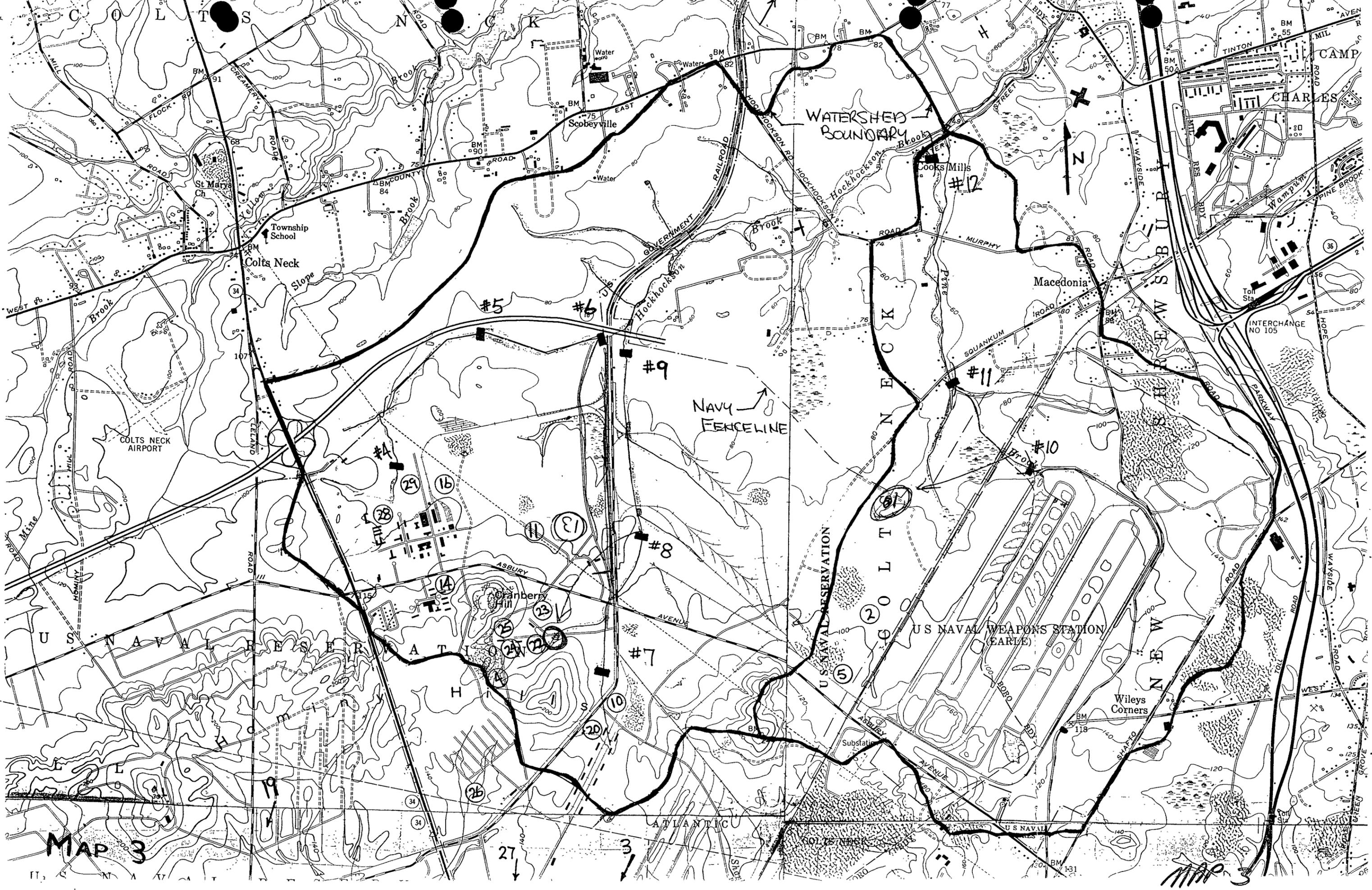
WATERSHED BOUNDARY

NAVY FENCE LINE

U.S. NAVAL WEAPONS STATION (EARLE)

MAP 3

MAP 3



9

10

